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PTO/SB/08A (10-96)

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Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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<p>Substitute for form 1449A/PTO (Modified by BSTZ 6/30/99)</p> <p><b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b></p> <p><i>(use as many sheets as necessary)</i></p>				<p align="center"><i>Complete if Known</i></p>	
				Application Number	09/658,393
				Filing Date	09/08/2000
				First Named Inventor	Berkner
				Group Art Unit	2621
				Examiner Name	Not yet assigned
Sheet	1	of	9	Attorney Docket Number	74451.P110

## **U.S. PATENT DOCUMENTS**

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Examiner initials *	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Translation? Yes/No
	Office or Country	Number	Date			

## **OTHER DOCUMENTS**

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TLC	ABRAMOVICH, F., Silverman, B.W., "Wavelet Decomposition Approaches to Statistical Inverse Problems," Biometrika, vol. 85, pp. 115-129, 1998.		
	BHKARAN, V., et al., "Text and Image Sharpening of Scanned Images in the JPEG Domain," Proceedings of the 1997 International Conference on Image Processing		
TLC	(ICIP '97), pp. 326-329, 1997.		

Examiner Signature		Date Considered	3/3/05
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MAY 16 2001 U.S. PATENT & TRADEMARK OFFICE		Filing Date	09/08/2000
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<i>TD</i>	DONOHO, D.L., "Nonlinear solution of linear inverse problems by wavelet-vaguelett	
	decomposition," J. of Appl. and Comp. Harm. Anal, vol. 2, pp. 101-115, 1995.	
	MALLAT, S., A Wavelet Tour of Signal Processing. Academic Press, 1998.	
	NEELAMANI, R., Choi, H., Baraniuk, R., "Wavelet-based Deconvolution for Ill-conditioned	
	Systems," in Proceedings of ICASSP, vol. 6, pp. 3241-3244, 1998.	

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Mark Hansen

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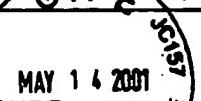


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<i>TDL</i>	POLESEL, A., et al., "Adaptive unsharp masking for contrast enhancement,"	
	in Proceedings of ICIP'97, pp. 267-270, 1997.	
	ZONG, X., Laine, A.F., Geiser, E.A., Wilson, D.C., "De-Noising and contrast enhancement via	
	wavelet shrinkage and nonlinear adaptive gain," Proceedings of the SPIE, vol. 2762,	
	pp. 566-574, Orlando, FL, 1996.	

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<i>TDL</i>	ANDREWS, H.C., Hunt, B.R., Digital Image Restoration. Prentice-Hall, Inc. Englewood Cliffs, New Jersey, 1977.	
	BERKNER, K., Wells Jr, R.O., "Smoothness estimates for soft-threshold denoising via translation	
	invariant wavelet transforms," Tech. Rep. CML TR98-01, Rice University, 1998.	
	COIFMAN, R.R., Donoho, D.L., "Translation invariant denoising," in Wavelets and Statistics,	
	Springer Lecture Notes (A. Antoniades, ed.), Springer-Verlag, 1995.	

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<i>TDC</i>	DONOHO, D.L., "De-noising by soft-thresholding," IEEE Transactions on Information Theory, vol. 41, no.3, pp. 613-627, 1995.	
	JAIN, A.K., Fundamentals of digital image processing. Prentice Hall, Englewood Cliffs, NJ, 1989.	
	KINGSBURY, N., "The dual-tree complex wavelet transform: a new efficient tool for image restoration and enhancement," in Proc. European Signal Processing Conf., pp. 319-322, 1998.	

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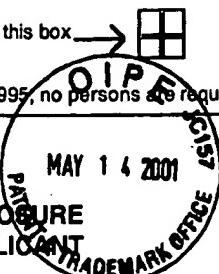
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TOK	LANG, M., Guo, H., Odegard, J.E., Burrus, C.S., Wells Jr, R.O., "Noise reduction using an un-decimated discrete wavelet transform," IEEE Signal Processing Letters, vol. 3, pp. 10-12, 1996.	
	PRATT, W., Digital Image Processing, John Wiley & Sons, NY, 1978.	
	ABRAMOVICH, F., Sapatinas, T., Silverman, B.W., "Wavelet Thresholding via a Bayesian Approach," J. Royal Statist. Soc. Ser. B, vol 60, pp. 725-749, 1998.	

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<i>TOL</i>	DEVORE, R.A., Jawerth, B., Lucier, B.J., "Image compression through wavelet transform coding,"	
	IEEE Trans. Information Theory, vol. 38, no. 2, pp. 719-746, 1992.	
	DONOHO, D.L., Johnstone, I.M., "Adaption to unknown smoothness via wavelet shrinkage,"	
	J. American Statist. Assoc., pp. 1200-1224, 1995.	

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<i>TD</i>	DONOHO, D.L., Vetterli, M., DeBore, R.A., Daubechies, I., "Data compression and harmonic analysis," IEEE Transactions on Information Theory, vol. 44, no. 6, pp. 2435-2476, 1998.	
<i>J</i>	LEVY VEHEL, J., Guiheneuf, B., "2-microlocal analysis and applications in signal processing" in Proceedings of International Wavelet Conference, Tanger, Morocco, 1998.	

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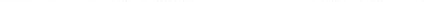
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<i>TDC</i>	MUNOZ, A., Blu T., Unser, M., "Non-Euclidean Pyramids," in Proceedings of SPIE Conference,	
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